

REMARKS / DISCUSSION OF ISSUES

Claims 1-21 are pending in the application.

The applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority document(s).

The Examiner is respectfully requested to state whether the drawings are acceptable.

Claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label number(s), and/or to replace European-style claim phraseology with American-style claim language. Claims 1-12 and 17-18 are not narrowed in scope, and no new matter is added.

The Office action rejects claims 1-16 under 35 U.S.C. 101. The applicants respectfully traverse this rejection.

The Office action asserts that a 'scheme' corresponds to a computer program. The applicants respectfully disagree with this assertion, because the word 'scheme' is synonymous with the word 'method'. However, in the interest of advancing prosecution in this case, the claims are amended to eliminate the word 'scheme'.

Because the applicants claim a new and useful method of encoding a data stream, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1-16 under 35 U.S.C. 101.

The Office action rejects claims 17-21 under 35 U.S.C. 112, first paragraph. The applicants respectfully traverse this rejection.

The Office action asserts that that the specification is non-enabling because of an omission of means for producing audio frames and means for generating a mean effective audio frame length. The applicants respectfully disagree with this assertion.

The applicants clearly teach that the audio frames can be produced by any of a variety of conventional means:

"Various encoding schemes have been considered as a basis for embodiments of the invention. In particular, MPEG-1 and MPEG-2, Layers I and II have been considered, but this is by no means an exclusive list of possible schemes." (Applicants' specification, page 12, lines 19-21)

The applicants respectfully maintain that this statement is sufficient to enable any person skilled in the art to produce audio frames.

The applicants clearly teach how to control the length of each audio frame, preferably by controlling the number of overlap blocks that are included in each frame (see, for example, Equations 1 and 2). With specific regard to MPEG-2 encoding, Tables 5 through 8 provide example selections of frame length sequences to provide an appropriate mean effective audio frame rate for a variety of combinations of video and audio frame rates. The applicants respectfully maintain that the detail provided throughout the specification in this regard is clearly sufficient to enable any person skilled in the art to produce variable length audio frames that have a mean effective audio frame rate that equals the video frame period, as claimed by the applicants.

Because the applicants' written description of the invention, and of the manner and process of making and using it, is presented in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains to make and use the same, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 17-21 under 35 U.S.C. 112, first paragraph.

The Office action rejects claims 1-4, 13-17, and 19-21 under 35 U.S.C. 102(a) over Fielder et al. (USP 6,226,608, hereinafter Fielder). The applicants respectfully traverse this rejection.

Fielder fails to teach encoding the lengths F of the audio frames j in a defined sequence of frame lengths $F(j)$, as specifically claimed in independent claims 1, 17, and 19, and fails to teach encoding the audio frames using a defined sequence of overlaps, as specifically claimed in independent claim 13.

Fielder specifically teaches that each audio frame's length/overlap is determined dynamically, depending upon the transients within the audio frame and other factors:

"The audio information is analyzed to determine various characteristics of the audio signal such as the occurrence and location of a transient, and a control signal is generated that causes the adaptive block-encoding process to encode segments of varying length." (Fielder's Abstract, lines 5-9.)

Fielder's FIG. 3 illustrates an Analyze block 45 that provides information to a Control block 46 that controls an Encode block 50, detailed at FIG. 5. As Fielder teaches:

"In this embodiment, analyze 45 identifies characteristics of the one or more audio signals conveyed by the audio information that is passed along path 44... In response to these detected characteristics, control 46 generates along path 47 a control signal that conveys the lengths of segments in a frame of segments to be processed for each audio channel. Encode 50 adapts a block-encoding process in response to the control signal received from path 47 and applies the adapted block-encoding process to the audio information received from path 44 to generate blocks of encoded audio information." (Fielder, column 9, line 55 – column 10, line 3.) And,

"FIG. 5 illustrates one embodiment of encoder 50 that applies one of a plurality of filterbanks implemented by TDAC transforms to segments of audio information for one audio channel. In this embodiment, buffer 51 receives audio information from path 44 and assembles the audio information into a frame of overlapping segments having lengths that are adapted according to the control signal received from path 47." (Fielder, column 11, lines 1-8).

As is clearly evident in Fielder's teachings, the length of each audio frame is not determined from a defined sequence of frame lengths or overlap lengths. In Fielder, the length of each overlapping audio frame is determined based on the characteristics of that particular audio frame. Different audio passages will be encoded with varying sequences of frame lengths, depending upon the characteristics of the frames within each passage.

Fielder does not teach the use of a defined sequence $F(j)$ of varying frame lengths or a defined sequence of overlap lengths as claimed by the applicants, and the Office action fails to identify where Fielder teaches such a defined sequence. Accordingly, the applicants respectfully maintain that the rejection of claims 1-4, 13-17, and 19-21 under 35 U.S.C. 102(a) over Fielder should be withdrawn.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

/Robert M. McDermott/
Robert M. McDermott, Esq.
Reg. 41,508
804-493-0707

Please direct all correspondence to:
Corporate Counsel
U.S. PHILIPS CORPORATION
P.O. Box 3001
Briarcliff Manor, NY 10510-8001